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PAINTED FOR
JAMES VICK,
ROCHESTER, N.Y.

SINGLE DAHLIAS.

FORBES CO. BOSTON & N.Y.



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FORGET ME NOT



MAY, 1885.

THE CELEBRATION OF MAY-DAY, or the first day of Mây, though now no longer observed, except in a few localities in Europe and Great Britain, was, in earlier times, almost universally recognized. The establishment or rise of this holiday is variously accounted for, but it is undoubtedly of very ancient origin.

Chambers' Book of Days, says: "Among the Romans, the feeling of the time found vent in their Floralia, or Floral Games, which began on the 28th day of April, and lasted a few days. Nations taking more or less their origin from Rome have settled upon the first of May as the special time for fêtes of the same kind. With ancients and moderns alike it was one instinctive rush to the fields to revel in the bloom which was newly presented on the meadows and the trees." The following statement of POLYDORE VERGIL, who wrote in the early part of the sixteenth century, is thus quoted by BRAND, in his *Popular Antiquities*: "At the calendes of Maie, not only houses and gates were garnished with boughs and flowers, but in some places the churches, which fashion is derived from the Romaines, that use the same to honour their goddesses of fruites."

The same authority gives this account: "In the old Calendar of the Romish Church, so often referred to, I find the following observation on the 30th of

April: 'The boys go out and seek May trees.' This received illustration from an order in a manuscript in the British Museum, entitled, *The State of Eton School*, 1560, wherein it is stated that on the day of St. Philip and St. James, if it be fair weather, and the master grants leave, those boys who choose it may rise at four o'clock, to gather May branches, if they can do it without wetting their feet: and that on that day they adorn the windows of the bed chamber with green leaves, and the houses are perfumed with fragrant herbs."

It appears from the records in regard to this day that it has been kept in some manner by most, if not all, of the nations of Europe; the French, the Germans, the Danes, the Swedes, the Russians, the English, the Irish and the Scotch have all had their peculiar festivities in honor of this day, and a full account of them would be voluminous.

At how early a date the King and court took part in May-day festivities is not known, but it was a customary practice in the fifteenth and sixteenth centuries. In CHAUCER'S *Court of Love*, we read that early on May-day "forth goeth all the court, both most and least, to fetch the flowers fresh." To further illustrate this point there is a record that "in the reign of HENRY VIII, the heads of the Corporation of London went outside the high

grounds to gather the May, the King and his Queen, CATHARINE of Arragon, coming from their palace of Greenwich, and meeting these respected dignitaries on Shooter's Hill. Such festal doings we cannot look back upon without regret that they are no more."

Here is SPENSER's description of the going out for the May :

Siker this morrow, no longer ago,
I saw a shoal of shepherds out go
With singing, and shouting, and jolly cheer;
Before them yode a lusty Tabrere,
That to the many a horn-pipe played,
Whereto they dancen each one to his maid.
To see these folks make such jouissance,
Made my heart after the pipe to dance.
Then to the greenwood they speeden them all,
To fetchen home May with their musical;
And home they bring him in a royal throne
Crowned as a king; and his queen attone
Was Lady Flora, on whom did attend
A fair flock of fairies, and a fresh bend
Of lovely nymphs—O, that I were there
To helpen the ladies their May-bush to bear.

In every town, or village, or populous neighborhood, it was a custom to have "a fixed pole, as high as the mast of a vessel of a hundred tons, on which each May morning they suspended wreaths of flowers, and round which they danced in rings pretty nearly the whole day." The record is not wanting that in procuring these poles, which were of considerable value, great liberties were taken by parties of youths, who did not hesitate to enter upon private grounds without the knowledge or consent of the owners, and select choice trees, cut them down and feloniously appropriate the poles, and bear them away. Sad social results, also, followed from the freedom allowed in the mingling of the youths of both sexes in their country rambles to gather May branches, and the custom had become so scandalous that at the time of the Reformation it incurred the disapproval of the Puritans, and the observance of the day was legally prohibited. At the restoration of the monarchy the custom was again instituted, but its observance was not so general as before, and the conduct of it was much modified.

"The custom of having a Queen of the May, or May Queen," observes the *Book of Days*, "looks like a relic of the heathen celebration of the day: this flower-crowned maid appears as a living representation of the goddess Flora, whom the Romans worshipped in their day. Be it observed, the May Queen did not join in

the revelries of her subjects. She was placed in a sort of bower or arbor, near the May-pole, there to sit in pretty state, an object of admiration to the whole village. She, herself, was half covered with flowers, and her shrine was wholly composed of them."

The observance of May-day in Great Britain was gradually dropped by the different ranks of society, from the highest to the lowest, the milkmaids of country districts, and the chimney-sweeps of London being the last to continue the festivities. In France the custom of enthroning the May Queen is still in vogue in some parts.

A writer in the *Literary Gazette*, in 1847, says: "And now the milkmaids' garlands are no more, and the dancing round the May-pole has passed away, and other May customs and ceremonies are fast being buried in that oblivion where many remnants of the habits and superstitions of our fathers have long been laid, it will be pleasant to you to know that in some secluded spots May-day customs are still observed, and are looked forward to with as much interest as ever. In Oxford the singing at Magdalen College still takes place, as you are aware, on the top of the magnificent tower. The choristers assemble there in their white gowns, at a little before five o'clock in the morning, and as soon as the clock has struck commence singing their matins. The beautiful bridge, and all around the college, are covered with spectators, indeed, it is quite a little fair; the inhabitants of the city, as well as of the neighboring villages, collecting together, some on foot and some in carriages, to hear the choir, and to welcome in the happy day. * * * The effect of the singing is sweet, solemn, and almost supernatural, and during its celebration the most profound stillness reigns over the assembled numbers; all seem impressed with the angelic softness of the floating sounds, as they are gently wafted by each breath of air. All is hushed and calm and quiet, even breathing is almost forgotten, and all seem lost even to themselves, until, with the first peal of the bells, the spell is broken, and noise and confusion usurp the place of silence and quiet. The boys who have been impatiently awaiting for the conclusion of the matins, now blow their trumpets lustily,

and, performing such a chorus as few can imagine, and none forget, start off in all directions, and scour the fields and lanes, and make the woods re-echo to their sounds, in search of flowers."

There is a naturalness in May-day festivities that brings a response from every one who feels pleasure in the charms of nature, and our readers, though strangers to all May-day customs, will enter into the spirit of WASHINGTON IRVING in the following description of his of a scene when traveling in England :

"I shall never forget," he says, "the delight I felt on first seeing a May-pole. It was on the banks of the Dee, close by the picturesque old bridge that stretches across the river from the quiet old city of Chester. I had already been carried back into former days by the antiquities of that venerable old place, the examination of which is equal to turning over the pages of a black-letter volume, or gazing on the pictures of FROISSART. The May-pole on the margin of that poetic stream completed the illusion. My fancy-adorned it with wreaths of flowers, and peopled the green bank with all the dancing revelry of May-day. The mere sight of this May-pole gave a glow to my feelings and spread a charm over the country for the rest of the day; and as I traversed a part of the fair plain of Chester, and the beautiful borders of Wales, and looked from among swelling hills down a long green valley, through which the 'Deva wound its wizard stream,' my imagination turned all into a perfect Arcadia."

The settlement of the New England colonies, by the Puritans, is sufficient reason for the neglect of all observance of May-day in that part of our country, and, in fact, in all parts that have been under the influence of that region by settlement and common sympathies and beliefs. Other causes, as effectual, have operated to produce a similar result elsewhere in our land, and the day has never had any general recognition here. The memory of it has, however, lingered in the minds of the people, and has descended from parents to children with occasional slight notice, such as a tramp in the fields or woods to gather flowers, or the diversion of young persons by a picnic in some sylvan retreat. Few persons of sentiment and imbued with a love of nature have not, at some time,

regretted the loss of the May-day holiday, invested by them with all of its charms and none of its abuses. The arbor-days that are now being instituted in many States will afford the occasion for social gatherings, and the expression of spring-time gladness that originally gave rise to the festival of Flora, and was succeeded by the celebration of May-day. In this country the term, May Flower, was early applied to the *Epigæa repens*, or what is called by some *Trailing Arbutus*. Although this plant frequently opens a few blooms very early, it does not usually come into full bloom until the roughest weather of spring is past. In those sections where it grows, as it does in this vicinity, it is always enthusiastically sought out by the young people, and the first day of May is often made the occasion for a wild-wood ramble to gather it. These excursions are joyous ones, and the pulses of young life beat high.

We conclude this sketch with an original contribution from the pen of Mrs. CATHARINE P. TRAILL,

A LAMENT FOR THE MAY QUEEN.

Weep, weep, thou virgin Queen of May,
Thy ancient reign is o'er;
Thy vot'ries now are lowly laid,
And thou art Queen no more.

Fling down, fling down thy flowery crown,
Thy sceptre cast away,
For, ah! no more in grove or bower,
They'll hail thee Queen of May.

No maiden now, with glowing brow,
Shall rise at early dawn,
To bind her hair with chaplets fair,
Torn from the blossomed Thorn.

Beneath thy flower-encircled wand
No peasant trains advance;
No more they lead, with sportive tread,
The merry, merry dance.

No lark shall spring on dewy wing,
Thy matin hymn to pour,
Nor childhood's voice shall shout "rejoice."
For thou art Queen no more.

The Violet blooms with modest grace
Beneath its nest of leaves,
The Primrose shows her pure pale face,
Her wreaths the Woodbine weaves,

The Cowslip bends her golden head,
And Daisies deck the lea;
But, ah! no more in grove or bower
The Queen of May we'll see.

Then weep, thou virgin Queen of May,
Sit down and weep with me;
Forgotten is thy festal day,
And lost thy name shall be.

DAISY LONGFELLOW.

A variety of the common Daisy, *Bellis perennis*, was sent out, last year, by the seedsman, BENARY, of Erfurt, Prussia, under the name of Longfellow. This variety was said, by its originator, to have flowers, or heads, of unusual size and doubleness, of a dark rose color, and to be noticeable from the length and stiffness of its flower stalks, whereby the flowers are rendered of considerable value for bouquets. We are pleased to

Longfellow, to those plants whose flowers have rose-tipped petals, but properly it belongs to the whole strain which has been developed by careful selection and inter-breeding; for, all the plants are similar in general appearance, such as the strong growth, the long flower stems, and the large size of the flowers, though some have pure white flowers, and there are some slight variations in color and fullness. In raising plants from the seed



DAISY LONGFELLOW, POT-GROWN—REDUCED SIZE.

say, after a year's trial, that this variety sustains the claims made for it, as above stated, and we here present an engraving of a pot-grown plant in bloom, of reduced size, and a full-sized single head, or flower. From these illustrations it will be perceived that the flower is of considerably larger size than the common, cultivated red and white, double Daisies, and the flower stems, which are twice the length shown in the engraving, indicate a variety of distinctly marked peculiarities. The plant is of vigorous habit, the plentiful leaves being of large size. The originator, by his description, has apparently intended to apply the name,

of this strain all these variations appear, and probably no one will regret this fact, for the pure white flowers are quite as desirable as those that have some color, especially for bouquet work, and this is one of the important claims of Longfellow over the old double form.

Mr. JAMES CRAIB, of this place, raised a greenhouse full of these plants in four-inch pots, the past winter,

which were at the height of their blooming season by the first of March. Our engraving was made from one of the specimens. These plants were for the town trade. The collection made a fine display. A temperature of about 50° during winter is all that is needed to bring these plants on in health. When arrived at the blooming stage they are very pretty for the window and as table plants, as the bloom is very continuous if not given too much heat. Like most plants in the house, they form a congenial home for the green-fly, and these must receive timely attention. Seed can be sown early in the house, or in a cold-

frame, and the young plants transplanted to the open ground when sufficiently strong, or they can be sown in the open border as soon as the ground is in good condition to work in the spring, or sowing may be done any time in spring up to June, if a cool and lightly shaded spot is selected. Old plants can be increased by division; each part after planting forming roots, and in this way any particularly fine specimen may be increased.

The Daisy is not well suited with our bright, sunny skies of summer, and consequently does not overrun our fields and lawns, as it does in Great Britain



DAISY LONGFELLOW—NATURAL SIZE.

and many parts of Europe, yet it can be successfully cultivated in the Northern States. It thrives best in partially shaded borders, or wherever foliage shades during the warmest part of the day; even in such places the plants rest for the most part during July and August, but they put forth their lovely flowers again when cooler weather succeeds. It is a favorite in many gardens, and this new acquisition will increase the number of its admirers.

We know of no flower more appropriately named than this one; its Latin name, *Bellis*, evidently being derived from *bellus*, pretty, handsome, lovely, &c., and the best authorities agree that its common name is from the Anglo-Saxon, *dæges-eye*, or day's eye, in allusion to its habit of closing up at night and opening with the light. This habit of the flower is thus noticed by one of the minor English poets:

"Now the blue fog creeps along,
And the birds forget their song;
Flowers now sleep within their hoods,
Daisies button into buds."

It is also mentioned by CHAUCER, in lines that are unexcelled for fervor of expression, and it is doubtful if any flower has ever called forth from poet's lips such words of admiration:

Of all the floures in the mede,
There love I most those floures white and redde;
Such that men call Daysyes in our town.
To them have I so great affection,
As I said erst when comen is the Maye,
That in my bedde there dawneth me no daie,
That I n'am up and walking in the mede
To see this floure against the sunné sprede
When it upriseth early by the morrow;
That blessed sight softeneth all my sorrow.
So glad am I, when that I have presence
Of it, to done it all reverence—
As she that is of all floures the floure,
Fulfilled of all virtue and honoure,
And ever ylike fair and fresh of hue:
And ever I love it, and ever ylike new,
And ever shall, till that my heart die,
All swear I not, of this I will not lye.
There loved no wight botter in his life,
And when that it is eve, I run blithe,
As soon as ever the sun gaineth west,
To see this floure, how it will go to rest,
For fear of night, so hateth she darkness;
Her cheer is plainly spread in the brightness
Of the sunné, for there it will uncloze;
Alas, that I ne had English rhyme or prose
Suffisaunt this floure to praise aright.

WORDSWORTH'S expressions in his poem to this flower, though intense, cannot equal those just quoted; its concluding stanza is full of the plant lover's quiet joy, and the poet's enthusiasm:

Sweet flower, for by that name at last,
When all my reveries are past,
I call thee, and to that cleave fast.
Sweet, silent creature,
That breath'st with me in sun and air;
Do thou, as thou art wont, repair
My heart with gladness, and a share
Of thy meek nature.

We all recall BURNS' ode to the "Wee, modest, crimson-tippéd flow'r," wherein he makes it the emblem of some rare virtues, and of the frailty of human life.

In one of his poems WORDSWORTH addresses the Daisy as "bold lover of the sun," and the expression is very proper for the climate of the British Islands, with their clouded skies, but it would never have been suggested here, where *timid lover* would seem far more suitable. It loves the light, but it cannot well bear the full force of the summer sun. In selecting a spot for it, let it be, therefore, one that is slightly shaded at mid-day, and, if possible, a deep, moist soil. The little care we may be obliged to take to raise this "bonny gem" will make it all the dearer to us.

NOTES ON THE DAHLIA.

The present is a jubilee year for Dahlia growers. At least, some of the European Dahlia fanciers and cultivators consider that it is a hundred years since the Dahlia was carried from Mexico to Spain, and its cultivation commenced. According to the best source of information we have, the first record of the Dahlia is in a history of Mexico in 1651, by Dr. HERNANDEZ, who therein figured and described two species of it. The Dahlia was introduced into the Royal Gardens at Madrid, from the Botanic Gardens of Mexico; it first bloomed in Spain in 1789. In the following year, 1790, the Abbé CAVANILLES described a specimen which bloomed in Madrid, and named the plant after his friend, ANDREW DAHL, a Swedish botanist. This species was *D. variabilis*, although he applied another name to it; in 1791 the same authority described *D. coccinea*. From Spain the Dahlia was sent into France and England, and was rapidly multiplied both by seeds and roots. The first double flower was produced at Berlin, in 1809, and from that time until the present new varieties have appeared every year. Until a few years since only the double varieties have been prized, and one would not deign to look with approval upon a single flower. But more natural tastes have since prevailed, and single varieties are now as much esteemed by many as the best double ones. Broad petals, regularity of form, and pure colors are the principal points that are prized in these single varieties.

For many years, it is thought that most, if not all, the double varieties were the progeny of *D. variabilis*, as possibly they may still be, though there is some probability that hybridizing has been performed between that species and others subsequently found in Mexico, and perhaps with *D. coccinea*.

In the early cultivation of the Dahlia, it was not uncommon for plants to grow eight and ten feet in height, and even more. In this respect the improvement has been very great, as the tall varieties now stand only about five feet high, while the dwarf or bedding sorts are from eighteen inches to two feet in height. While the large flowers of the tall double varieties are showy on the plants, their size is too great for vase flowers or for use in bou-

quets. Within a few years has arisen another class, called Pompon or Bouquet Dahlias, and consisting of varieties with all the colors of the larger flowers, but the flowers only from an inch in diameter, and even less, to two inches; these are of great value as cut flowers. The single varieties are the most beautiful as vase flowers. New single varieties are raised every year, and it is a pleasing employment to originate good single varieties, as may be easily done, by sowing the best selected seeds. The seed should be sown early, February or March, in order to have the plants bloom the same year, though good tubers may be raised ready for the following season's planting if the seed is sown quite late in spring. The seed can be sown in a pan, in a warm temperature, and the young plants pricked out separately into small pots. But those who have neither facilities nor time for raising seedling plants can multiply Dahlia tubers with sufficient rapidity. The tubers, in early spring, placed in a moist heat, soon develop a number of buds, and the crowns can be divided so as to leave a bud on each piece with a piece of tuber attached; each piece can be set out in a rich spot in the garden specially manured and prepared for it, and will form a good plant. Of course, it is well understood that those who desire to increase it more rapidly can do so by keeping the tubers in a warm frame or propagating house, and taking from them successive crops of green cuttings and striking them in heat.

The Dahlia is, no doubt, destined to be more prominent in good gardens than it ever yet has been. The tall, handsome plants with large double flowers will occupy conspicuous places where they will show to advantage. The bedding or dwarf varieties will be raised in masses in beds and on the borders of shrubberies; the bouquet and single varieties will be valued as cut flowers. Thus there is a special value to each class, and blooming, as they all do, in the autumn, they are without rivals in their season.

The varieties shown in the colored plate are Cyrus, a rosy purple; Lutea grandiflora, a clear, deep yellow; White Queen, one of the finest white varieties, and Paragon, a maroon, shaded with purple.

CORRESPONDENCE.

HOW TO COMBAT THE CODLIN MOTH—PRIZE ESSAY.

During the past thirty years this destructive insect has been spreading with amazing rapidity in all the orchards of the Northern and Western States. Visit horticultural exhibitions, and you will find among the selected fruit too many specimens disfigured by the burrowing of this caterpillar. For several years Kansas and Nebraska entirely escaped its depredations; but this destructive insect enemy can now be found in nearly every orchard.

There are two broods every year, in this latitude. The first brood, having passed the winter in a chrysalis' state, appears in the moth state in the month of April, the moth appears a month later in the States east of the Mississippi river, and lays its eggs in the blossom end of the newly formed Apple. In general there is but a single worm in each Apple, but two are sometimes found in one and the same fruit. Most of the infected fruit, when the larvæ has burrowed into the core and got its full growth, falls to the ground; and about the middle of June the larva eats its way out, and usually climbs the trunk of the tree, on which it constructs its cocoon under loose scales of bark. While some of the first caterpillars are leaving the Apples, others are but just hatched from later deposited eggs, and thus the two spring broods run into each other. The second brood of moths, in the course of a few weeks, comes out of these cocoons and lays its eggs in the more matured fruit, many of which, owing to their greater size, hang on the tree till gathered. The larvæ proceeding from these eggs eat their way out of the fruit in the same manner as the first lot of larvæ, and construct their cocoons in the same hiding places, and in the same manner; and it is this second generation of larvæ that live in their cocoons through the winter, and come out in the moth state in the following spring, to infest the fruit of our Apple orchards and lessen its market value. To check and control this insect pest the following practices are successfully employed:

1. As already noted, the greater portion of the early infested fruit falls prematurely with the worm to the ground; hence, much can be done toward diminishing the numbers of this little pest by picking up the fallen fruit as soon as it touches the ground. Hogs and sheep are turned into the orchard by some to eat the fallen fruit, but we have never found them useful nor practicable allies among low-stemmed trees.

2. But there is another remedy which is always practicable, and more infallible than the use of hogs and sheep; it is that of entrapping the worms by the use of paper bandages. Common straw wrapping paper, 18x30 inches, can be bought for sixty cents a bundle; each bundle contains two hundred and forty sheets, and each sheet folded lengthwise thrice upon itself will give us eight layers between two and three inches wide, and of sufficient length to encircle ordinary sized trees. It is easily drawn around the tree and fastened with a tack, and so cheap that every orchardist can afford to use it. Strips of old woolen or cotton cloth make excellent traps, and do not tear so easily in handling as brown paper; fasten these around the tree about two feet from the ground. Pack the crotch of the trees full of newly cut grass; in a few days this will become as compact as a piece of felt. The traps being all set, visit the trees every week; slip up the band and look on the bark underneath it for the cocoons of the insect. They may be known by their being about the length of a finger nail, constructed of a white gauzy silk. Destroy all you can find on the bark; pass the band through a clothes wringer, replace it in its old position, and pass on to another tree. At the same time do not forget to inspect the crotch, as this is a favorite place of concealment for those worms that come out of the Apples that are still hanging on the tree. This process must be continued from the first week of June until the first week of October.

These three materials for the construction of traps are all good, and the orchardist will be guided in his choice by individual circumstances. The philosophy of the band method is simply this: the worm dislikes the light; in quitting the fruit, whether on the tree or on the ground, instinct leads it to crawl down or up the tree in search of a cozy nook in which to spin its cocoon. The shelter of the bands afford the hiding place it seeks, and in ninety and nine cases in a hundred they accept the lure provided. To make this system perfectly effectual, the following rules must be rigidly observed: 1. The bands should be placed around the tree by the first of June; 2. They should be examined every week; 3. The trunks of the trees should be kept free from scaly bark; 4. The ground around the trees should be kept clear of weeds and rubbish.

3. Like all old-fashioned orchardists, I believe in attracting several species of useful birds, and enlisting their unwearying services in the warfare upon this pestiferous insect. A close study of the habits and wants of these little workers, if their wants are supplied, will soon induce them to make the orchard their home. Small boxes or long necked gourds nailed to the limbs of the trees will invite the blue-bird to build his nest. As the destroyer of the larvæ of the codlin moth and multitudes of other noxious insects, this bird stands without a rival. The black-cap titmouse should also receive encouragement. Hanging the entrails and fatty offal of slaughtered animals on the branches of the trees will bring large numbers of these hardy little birds into the orchard. The long necked gourds will afford roosting places during the long nights of winter, while the days will be spent in hunting up the insects which lurk in the bark and branches of

trees. A few stakes driven into the ground at different points in the orchard will attract the king-bird, and perched on these, like a sentinel, he will stand from "early dawn till dewy eve," ever and anon making rapid sweeps after every passing insect. The forked limbs of the umbrageous Apple tree will always attract the orchard oriole, who is an industrious worker, and an unfailing insect detective, and therefore the true friend of the orchardist.

4. Many of the caterpillars of the second brood yet remain in the Apples, even after they are gathered, and these wormy specimens are barreled or put into bins with the sound ones, and stored away. From them the worms will continue to issue, and they generally find plenty of convenient corners about the barrels and boxes and the joists overhead in the cellar. Hundreds of these cocoons will, some years, often be found in the fruit-room, and these, if unmolested, would be sufficient to abundantly continue the species for another year. And when we consider that every female moth which escapes in the spring lays from two to three hundred eggs, and thus spoils as many Apples, the practical importance of thoroughly examining, in early spring, the roofs of the cellar and all barrels and boxes, becomes at once apparent. All cocoons found should be at once destroyed. A naked light placed in the cellar for a couple of hours, every evening during the month of April, will attract and destroy those that have been overlooked.

During fifty years' experience as an orchardist in Illinois and Kansas, I have never failed to successfully combat the codlin moth by putting into yearly practice the remedies here recommended, thus securing bounteous crops of perfect fruit.—J. W. ROBSON, *Cheever, Kansas.*

SPOT AND RUST ON BEANS.

One of the greatest drawbacks in growing Beans extensively is the difficulty of getting varieties and strains of seed that will not spot or rust. These maladies are not identical nor always simultaneous, yet they both indicate a weak constitution. But a great deal depends upon the skill and knowledge of the grower. Some sorts will be rendered utterly

worthless by spotting when planted on a soil highly manured with dung, while they will grow quite clear on a poorer soil or with commercial fertilizers. Seasons have a good deal to do with this difficulty, and even more with regard to rust. Yet some varieties, and some strains of other varieties, seem to be "ironclad," and can be always relied

upon as free from both these diseases. With me, all strains of Yellow-eye, White and colored Valentines, Mohawk, Red Eye, Mont d'Or, Wax, all the Flageolets, and the Refugee grow clean wherever planted, and in all seasons. Crystal White Wax, some strains of Pea Beans and of Marrows, grow clean with fertili-

zers, while Ivory-pod Wax, in fact, all the dwarf Wax Beans, except those with black seeds, and the Dwarf Horticultural are almost worthless from spotting. Pole Beans spot far less than dwarf sorts, but are quite as subject to rust. I should like the experience of Bean growers in regard to these diseases.—T. H. HOSKINS, M. D.

THE CODLIN MOTH—PRIZE ESSAY.

What practices can be most successfully employed to secure the Apple orchards from the codlin moth?

I am aware that some of the best talent in the land has sought to answer this question, yet, with all the information that has been brought to the aid of the fruit-grower, the codlin moth continues its destructive work.

In my practice I have discovered how to destroy easily this insect in such numbers that it is no longer a pest; but I have never made this method known outside of the circle in which I live. I was instructed by a friend to place sweetened water on the bee stand to catch the bee moth. I did so, and went the next morning and found six moths, but from examination they proved to be the codlin moth. I then determined to try an experiment to catch codlin moths, and in the evening a basin of sweetened water was hung on a limb of a Harvest Apple tree; to my joy and surprise I found, next morning, the liquid in the basin was completely covered with codlin moths. I at once ordered the tinsmith to make me thirty-five or forty basins, holding a trifle over a pint each, with wire bales by which to hang them up.

The place selected to hang the basins should be open and easy of access. No more liquid should be prepared than is needed for immediate use, for if kept long it will lose its ripe Apple or new cider smell and taste. For thirty or thirty-five basins take a gallon of rain water and sweeten it, and then add a little vinegar to give it aroma, for it is the ripe Apple or cider smell that attracts the moths to their liquid graves. I think Sorghum molasses is best for sweetening. The time for commencing the use of the bath will depend on the season, somewhere from first to the fifteenth of May, and it should be continued until July, when the first brood of moths will have been captured.

By hanging out a basin as a tester, about the time the moths are expected, their arrival can be exactly determined. When this is known, place the basins in position and at dusk put about a gill of the prepared liquid in each. In the morning, on visiting the traps, you will find from one hundred to three hundred codlin moths in each one. Do not allow the liquid to remain in the basins more than two or three days at a time, and then sponge them out, and refill them.

In August there is a second brood of insects, and to be prepared for them it is necessary to keep up a basin or two until they appear.

This is a sure method of destroying the codlin moth, and almost any member of the family can attend the basins through the summer. When the season is over pack away the basins for future use. One basin will serve two trees, unless the trees are very large. There is one very important fact in connection with this method that should not be overlooked, which is, that three or four different kinds of moths besides the codlin moth are captured; there is the big, clumsy, dark moth that produces the tent caterpillar, and the little silver-winged moth the mother of the white-web caterpillar, and at least one other. If these insects were not enemies of the orchard they would not be apt to be caught in such a trap. This method is no humbug, it saves all the time of hunting up larvæ, pupæ and cocoons, and there is no more need for hay bands and old rags.

The codlin moth is the mother of the apple worm, which every child knows, and every housekeeper hates that makes an apple pie. It is a harmless little insect, about a half inch in length when the wings are folded; it is of an ash color, with embroidered calico wings; she flies abroad only at night when she visits one branch after another, depositing a little

egg in the blow-end of the Apple, and as soon as her stock of eggs is exhausted she dies. The eggs soon hatch, and the worm eats its way to the core of the Apple, and then the injured fruit usually falls to the ground; here, if the fruit is not picked up by hogs or sheep the larvæ soon leaves it and burrows into the ground and there spins for itself a winter house, or else hatches out, producing a moth that will visit the fruit in August.

But the object sought at this time is not a minute life history of the codlin moth, but a means for its destruction, and this I have given. It is no guess work, but a recital of my experience and practice, and by which I have been rewarded with the nicest Apples I ever saw, the wonder and admiration of every one. I hope the method may be a benefit to every lover of the Apple.—S. J. RUNDEL, *Pine Creek, Michigan.*

WILD FRUITS IN COLORADO.

Before cultivation and settlement many of the mountain valleys are full of wild fruits. Plums are scattered over the plains and foothills in thickets often of

leaves in spring, are beautiful as Almond flowers. The spicy perfume blown far over the prairie is strong and sweet. In the fall, when the fruit ripens, it glows in



WILD GRAPE OF COLORADO.

great extent. They do not grow on the mountains. The trees are low, ten or fifteen feet on an average; twisted and thorny. The bark is gray, and the blossoms, which cover the boughs before the

groups of gold and crimson through the leaves. A sort of insect infests it, however, and the promise is sometimes deceptive. At its best the wild Plum is an inch long, dark red, and very agreeable



WILD PLUM BLOSSOMS.

in flavor. The Choke Cherry is too well known to need description. Wild Cur-

rants are of three kinds, red, yellow and black. The wild Mulberry, as it is called, *Rubus odoratus*, blossoms in May, large, white flowers, beautiful and abundant. The shrub has thick, dark green leaves, and would look well in a garden. The fruit ripens in summer, and has somewhat the form of the Black Raspberry; it is tasteless and insipid, and is eaten by children and Indians. The Indians, that is, the squaws, used to gather all kinds of wild fruits, pound them up with a flat stone, and dry them in cakes in the sun—an odd mixture. The poison Currant has tiny green blossoms, and about July is loaded with scarlet berries. The berries are sweet and pleasant, but their hairy skin is bitter. Drowsiness and nausea are caused by them; I never heard of fatal results. A small, red Cherry is found in mountain gulches, where, also, abound Strawberries, Gooseberries and Raspberries. The wild Grapes, Mustang Grapes,* are along the water courses, small, acid, puckerish fruit, often in heavy clusters. They are used by settlers for preserves and wine, but are too sour to eat. A fruit called the Oregon Grape, *Berberis Aquifolium*, is used for cooking by some housekeepers, as it abounds near the hills.—MARION MUIR.

* *Vitis riparia*, of MICHAUX? Not *V. candicans*, of ENGELMANN, which is the Mustang Grape of Texas.—EDITOR.

GARDEN NOTES.

It is now about fifteen years since I adopted the rule of always plowing my garden in the fall, and it has done much to give me an early and easily worked garden. Probably on a light, sandy soil fall plowing would not be so beneficial, but for all soils inclined to be heavy, and that if plowed in spring are cloddy, I recommend it. To do the most good, however, it must be done right, and the right way is to plow in narrow lands, from twelve to sixteen feet wide, back-furrowing, so as to make them high in the center, and then with a shovel clean out all the loose soil from the dead furrows, and throw up to the middle; then open a furrow so as to carry off all the water from the garden, and not allow it to stand in the dead furrows to saturate the soil. One who has never tried this

plan will be surprised to see how soon the garden will dry off in the spring, and how fine and mellow a little working will make it.

I prefer, also, to manure at the surface in the fall, as the freezing and thawing of the manure fines it, so that when the garden is harrowed in the spring it mixes the manure thoroughly with the surface soil. As it is best not to drive over the land after it is plowed, we plow a land at one side of the garden and manure it, and then plow the next one, and continue until all the garden is plowed. The manure is prepared beforehand by turning and mixing until it is well fined, and all seeds destroyed. If the manure is convenient a man with a team will plow, manure and clean out the furrows of about one-fourth acre for a day's work, and one

hour's work with a light harrow in the spring will make it in good condition to plant.

Another essential point, if one would have a good garden, is that it should be free from foul seeds. I think nine out of ten of the gardens among farmers are allowed to mature a crop of weeds the latter part of the season, and usually this is the result of carelessness. After June, or when such early crops as Peas, Lettuce and Radishes have matured, no further use is made of the land, and as it has usually been manured in the spring, it grows a lusty crop of weeds, and fills the soil so full of seeds as to quadruple the work of cultivation of such plants as come up delicately, and which must be kept clean by hand. The evil of ripening a crop of weed seed is not short lived, for the seeds will remain in the soil for many years and germinate when the spring opens. I have a one-fourth acre garden that I have not allowed a weed to go to seed on for twenty years, but it took five years of clean culture before I could see much improvement in it, and it was ten years before the old seed in the soil ceased to give trouble. As an aid

to keeping the garden free from weeds, plant everything in rows running the length of it, and put together those varieties which will ripen about the same time. For example, one of the narrow lands or beds I speak of can be planted in early Peas, Lettuce, Spinach and Radishes, and these will all be past use in June, when the ground can be worked by horse power till mellow. Then follow with some later crops, as Cucumbers or Sweet Corn. Another bed can be planted in Potatoes, and the middle of June, Hubbard, or some other variety of good winter Squashes planted, and a full crop grown. In my latitude, forty miles north of Cincinnati, the Hubbard Squash matures if planted the last week in June. If nothing else is wanted, plant Sweet Corn to grow fodder for the cows, even as late as the last of August, for you will be more likely to keep the land clean and you will get some benefit from the crop.

One more point. Make all rows straight, not only because the garden looks better for it, but much hand weeding is saved by it, especially when Carrots, Parsnips, Onions, &c., are raised.—
WALDO F. BROWN.

RAISING CAULIFLOWER.

The first step toward ensuring success in the production of a crop of Cauliflower is to start right, by giving the plants a well enriched, deep, loamy soil, and it is decidedly a waste of both time and money to attempt to grow them with light manuring and indifferent cultivation. The Cauliflower prefers a well enriched, deep, loamy soil, and a good crop can generally be obtained on land that has been heavily manured for an early crop of Peas or Potatoes, provided that it is properly prepared and the plants well cultivated and cared for. The ground can be readily prepared by giving it a good dressing of decayed stable manure, and this should be well mixed with the soil by means of repeated plowings, or on a more limited scale by means of the digging fork.

The ground should be well harrowed and pulverized as finely as possible, when it should be marked off in rows two feet apart each way. At each intersection a handful of concentrated fertilizer is scattered and well mixed with the soil by

means of the hoe, at the same time forming a hill about two inches in height.

The next consideration is setting the plants. This should be done just after a rain, care being taken to firm the ground well around the roots. I find that it is very satisfactory to make at least three successive plantings, one about the fourth of July, another about the middle, and the last toward the end of the month, about equal quantities of each variety being used at each planting.

After growth commences the plants should be well cultivated, and at each hoeing let a little earth be drawn up around the plants, and as soon as the heads commence to form, in September, turn a few of the outside leaves over the head; by so doing they will grow more compact, and while it protects them from sun and rain, materially improves their appearance by preventing them from becoming stained or spotted.

The plants are obtained by sowing the seeds on a nicely prepared border, about the tenth of May, the seed being sown in

drills about a foot apart and ten feet in length. Sow the seed thinly and cover slightly, and as soon as the young plants make their appearance they should be dusted occasionally with soot or tobacco dust to prevent the attacks of the Cabbage fly, which in many instances destroys the young plants almost as fast as they make their appearance.

After the plants have been transplanted and are about half grown they often become so infested with the green Cabbage worm that they are more or less injured, and unfortunately these pests are

more numerous and destructive where a few hundred plants are grown than where they are on a more extended scale. It is said that the kerosene emulsion or a sprinkling of strong tobacco water will destroy them if applied in time, but all such remedies should be applied with caution, and nothing should be applied after the heads commence to form.

For the late crop the large *Algiers* and the *Early Paris*, which is the same as *Sherburn's Nonpareil*, are the varieties usually employed in this part of the country.—CHAS. E. PARNELL.

HOW TO DRESS FOR THE GARDEN.

The redemption of women's health, I am more and more convinced, depends on their taking to out-door life and activities. Reading high class memoirs which are in every one's hands now-a-days, of the *CARLYLES*, the *STERLINGS* and *F. D. MAURICE*, one is distressed to hear the continual story of weak health, and women who, brought face to the realities and efforts of life, immediately droop, languish, and are a long time dying. If they have a house to keep, and a share of the actual work, like *Mrs. CARLYLE*, at *Craigenputtock* and *Chelsea*, they sicken mysteriously, and their life is a time of wrestling with household affairs, alternating with refuge on the sofa, or months in the doctor's hands, in that wretched, unimprovable state which justified the sigh of a much tried husband who "wished his wife would get better, or something!" Have I not, through the ignorance of my day and generation, wasted life enough in attacks of the familiar household demon, nervous prostration, which only vanishes on turning the patient out of doors. Twice and again, friends have looked pityingly on me as good as gone, but taken out of doors ten hours a day, as good for nothing else, sun and wind wrought their spell of healing, and health came again. Henceforth no more in-door life than must be for me, and I would urge other women to fashion their lives so as to spend them more in the open air. They might, if they would, try by simpler ways of housekeeping, more conveniences, the habit of dispatch instead of dawdling, and doing much of the work itself out of doors, or on a porch screened by vines and flow-

ers half the year. Who would not have the company of sweet air and waving branches in place of kitchen steams and sights. My model house, that is to be, will have a large kitchen, with sky lights and glazed porch for work, such as the winter resort hotels have for promenades and games. But this is aside from the question.

Women will find more strength than they dreamed of possessing if they live out of doors, and much of their comfort in garden or field depends on being properly equipped for it. Brisk work is impossible in heavy garments and feet weighted with rubbers or thick boots. I stand amused, even when in a hurry, at seeing my lady housekeeper appear for her rare strolls in wood or garden, after approved traditions for young women, with gauntlets, broad hat, wrapped in a thick blue veil, waterproof and jersey, walking boots and rubbers to go a hundred yards into the woods after *Anemones* or evergreens, or to drop a few flower seeds. She dreads sun and wind for her complexion, and catches cold on slight opportunity, damp, fog or dust drives her to the house disgusted, and glad to take refuge in the kitchen over her mince pies and meringues, where it is lucky for others she prefers to be. In the present state of things it is fortunate for the women who love out-door life that there are those who cling to the chimney corner, house-plants, like *Bouvardia* and *Cissus*, which won't bear less than 70° of inside heat.

Now, I take cold in-doors, everywhere, in the parlor of friends with a draft on the back of the sofa, in church with two win-

dows open opposite or the vestry door ajar behind me, in depots and lecture rooms, get cricks in the neck, sneezes that convulse me to suppress, and coughs that banish me in disgrace. But I never catch cold out of doors, winter or summer, if properly dressed, and weather never counts unless it is thunder and lightning. A woman who wants to be healthy and comely after she is thirty should wear flannel from neck to heels three-fourths of the year. To this, for the garden, she may add a pair of loose flannel trowsers, such as girls wear in gymnasiums, a light felt skirt, and dress of washing material, print, gingham, or brown linen, which last is the approved gardening dress of English ladies, and a very neat, ladylike costume. S. P.'s favorite garden gown is a loose lined frock of indigo print, that comes out fresh every time it is washed. Flannel dresses wont do for garden work, as they hold dust and smells. For chill days add a loose jacket of dark swan's down flannel, or something equally light, a mere feather weight, but warm, a straw hat with brim only wide enough to shade the eyes, for a flapping brim is troublesome windy days, and gets in the way among branches. My favorite is a supple leghorn hat, which bears rain, and can be tied down over the ears securely. My neighbors wear brim hats and feathers out in the garden, but they don't spend half their time there, like the old leghorn and its wearer. A sweeping wrapper, a trim skirt dress and fancy hat are out of keeping with honest work in the garden, and women who dress for appearance miss the greatest charm of fitness. One need not take the place of a scare-crow, but a faded calico and towel tied round the head are in better taste than a dress too good for the work in hand.

Strong castor or wash-leather gloves, with long, close wrists to keep out the dust and creeping things, are a luxury in garden work, for one wants the use of her hands afterwards, and weeds will stain, and their juice roughen, the skin. You never find me in the garden without gloves, generally in my pockets or in the basket; still I advise other people to get in the habit of wearing gloves at work. For the feet, cheap elastic cotton and wool stockings, and, greatest comfort of all, the leather walking boot with rubber

soles, which dispenses with rubber overshoes. A working shoe for a woman should be the lightest possible, an ounce of sole or heel weighs like a cannon ball on the sensitive spine, and I have worked in slippers many a day rather than bear the weight of shoes and rubbers. But a friendly hand sent me one of the chief minor comforts of my life, a pair of the new Common Sense walking boots, the sole inlaid with rubber on the tread, which takes the wear, prevents damp, and gives ease of step by its springy nature. No more dread of dampness soaking through the soles, no stiffness of limbs after working on moist soil or in the greenhouse. With flannel wear and Common Sense boots one may defy rheumatism and fatigue. I have not worn an overshoe since owning these boots, and shall not till the snow is over shoe tops, calling for knee boots, New England friends will find these Common Sense shoes every way suited to a damp climate and soil, well made and lasting, and I believe JORDAN AND MARSH, of Boston, have the sale of them and send them by mail. The springy soles are easy for long walks, and there is no dampness or drawing of the feet, as from wearing rubbers. Another great convenience for those who love to be out and about in all weathers, is a waterproof cape and skirt to button over the dress. A long rubber cloak can be cut over in this way to good purpose, and the proper dress for farm affairs in stormy weather is a thick Jersey waist or Cardigan jacket above the neat felt petticoat, with waterproof buttoned over all. I mention this for the thousands of sensible women all over the country who put their own hands to work and oversee out-door matters. One woman in Iowa writes a most breezy, wholesome letter, ladylike in diction, handwriting and sentiment, asking for a practical sort of habit, as she rides miles every morning, over the farm, to see to affairs, in the absence of her husband, and part of the business is feeding two hundred hogs. You remember the heiress and beauty of one of KIRBY'S novels, who settles down as a farmer, rearing Chester pigs. I should prefer fruit, poultry and bees for a woman, hating pigs and their ways, of every breed, Berkshire, Chester or human. But if she must see to pigs or stock of any kind let

her be well dressed for it, not in hampering clothes which exhaust her strength and leave her damp, chill and wretched. It don't sound very much like an invalid to say that cased in waterproof, I was out in a driving storm all one forenoon, last June, transplanting wild Sweet Brier and black Raspberries. But they never do so well as when set in the rain, and I was

none the worse for it. If one trains herself to mind all the accidents of weather both profit and usefulness will be shortened, while neither life nor health are the better for it. So, if English ladies of rank can go deer shooting in pouring rain, defended by tartan, that turns the wet, we may see to planting, fowls, and cattle, if be, without bespeaking the weather.—SUSAN POWER.



May

FOREIGN NOTES.

FASHIONABLE FLOWERS.

What a pity it is that any one class of flowers should become fashionable, just as if all flowers were not beautiful in their own way, and far above the mere chattering patronage of any particular set of admirers. Of all personal ornaments flowers are the most precious—far too valuable and everlasting to be spoken of in the same breath with the productions of the jeweller or the milliner, and yet we are told that Orchids are the fashionable bridal bouquets, because some one or two daughters of millionaires carry them. Very often nothing less graceful or more inappropriate could be chosen. The idea with many seems to be simply to find the most rare and unique species of natural flowers, independent of beauty; if they cost much and are rare, that is quite sufficient. The over-strained effort always betrays itself, and Orchids were never yet more highly valued by people of refined taste than were the Wild Violet, or the Hedge Rose. No CHAUCER, no HERRICK, no WORDSWORTH, has sung of the Orchids as they have sung of Daisies, of Daffodils, or of the modest Snowdrop, but they have often been exhibited as the flaunting decorations of those who have no higher appreciation of them than that they were costly, and so to some extent the ensign of wealth rather than of beauty. It is a significant fact that, just at present, the highest and best cultured people are growing hardy flowers in preference to Orchids.—VERONICA, in *The Garden*.

BULBS AFTER FORCING.

A writer in *The Garden* gives the following experience in regard to the after treatment of Dutch bulbs that have first been bloomed in pots:

"We annually plant our Hyacinths in herbaceous borders after they have bloomed the first year in pots. They are placed in sandy soil, such as refuse from the potting shed or anything containing plenty of sand, because our soil is of a stiff, retentive character. We plant the

bulbs from three inches to four inches deep. The following season they produce good spikes of bloom, and annually afterwards they bloom equally well, and make an effective show in the borders in spring. Some of them have now been in the same position five years, and are quite as good, perhaps a little better, than when first planted, since which they have not been disturbed. I do not think that anything is gained by lifting the bulbs annually. We use all our forced bulbs, such as Tulips, Narcissi, Jonquils, Crocuses, &c., in the same way, and they all produce blooms which are useful." No doubt much of the deterioration of bulbous plants in the open ground after a few years is due to their disturbance at unseasonable times while the ground is being dug for other plants; this could be avoided for the most part by having their places marked at the time of blooming. Exhaustion of the border is another cause of their decline; if a good top-dressing of old manure is given in the fall the effect will be prompt and satisfactory, as evinced by vigorous flower stems and good sized blooms, contrasting greatly to the disadvantage of similar bulbs left to themselves, and without care, year after year.

THE WHITE PERENNIAL PEA.

This is a very old inhabitant of our gardens, and one which has adorned the porch of many a country cottage home, and may do so still, though in fewer cases than in days gone by; and it is among the best and most useful of perennials. It seeds freely, and what need is there for any lack of so useful a plant? We have few plants which produce white flowers in greater abundance than this, while for durability it will also vie with many; the flowers are as freely cut as produced, and seeds are not, as a natural consequence, forthcoming. It is not one of the easiest plants to increase in other ways. In dividing the plants, unless the stools are large the operation is attended with some difficulty, and must not be taken too hurriedly in hand. I do not

like dividing them at all, for when planted out the long white roots descend to a great depth; and as these are too brittle to be coaxed in any way, they have either to be cut or go into much larger pots than they really require.

Those who possess large roots and are desirous of increasing their stock cannot do better than lift the old plants at once, (early spring,) pot them, and place them in the greenhouse. In potting allow the crown to stand higher than usual. As the shoots are produced and attain a length of three to four inches they should be stripped off with a heel attached, which with the crown well above the surface will easily be accomplished. Insert these in sandy loam, and if possible accommodate them with a gentle heat, and keep them close under the handlights, and they will form roots in about fourteen days. I prefer not using a knife, as by so doing that portion of the heel which emits roots most freely is invariably sacrificed. In this way the stock may readily be increased, and it would be difficult to have too many of so desirable a plant.—J. H. E., in *Journal of Horticulture*.

FORCING LILIES.

The forcing of Lilies for supply of the London markets with plants and cut flowers early in the season, has undergone a remarkable development of late years, and is now carried on to a very large extent in many of the nurseries in the suburbs of the metropolis. At the Boleyn nursery, Upton, Mr. CROWE has devoted special attention to the forcing of Lilies for several years past, and this season he has three or four spacious houses devoted to the work, and the fact

is interesting as indicating in some degree the direction which public taste is taking at the present time. White Lilies are alone in request, and the kinds grown by Mr. CROWE are the *Lilium Harrisii*, *L. longiflorum*, and the common white Lily, *L. candidum*, which is proving one of the most useful of the white Lilies for forcing. The manner in which the bulbs are potted is worthy of notice, for not only is it simple, but judging from the results, is the best that could be adopted. Five and six inch pots are alone employed, chiefly the larger of the two sizes, and three bulbs are grown in each. A few crocks are put in the pots to ensure efficient drainage, and these are covered with a little of the compost, enough being perhaps put in each pot to form a layer about one and a half inches in thickness. The bulbs are then placed upon the soil without any covering, and the pots are placed in any suitable position under glass that may happen to be available. When they commence to grow they are, of course, placed upon the stages, that they may have the full advantage of the light and air. No addition is made to the soil until the stems are two or three inches above the rim, when the pots are filled with a rich compost, into which the stem roots very quickly push. It is considered by Mr. CROWE that a much more satisfactory growth is obtained by adding a large proportion of the soil after the plants have made considerable progress than by filling the pots in the first instance, and the appearance of the plants in all stages is a sufficient justification for the course taken.—G., in *The Gardener's Magazine*.



PLEASANT GOSSIP.

THE ARBUTUS' WELCOME.

In a warm April shower, and soft wind that blew
Across the dead leaves where the Arbutus grew,
A tiny bud said to her sweet little mate,
"Ah, the breeze is so balmy, I fear we are late;
Mother Nature will mourn us if we're not in place,
With full-opened blossoms, the May-day to grace.

"For you know the commission, that we must obey,
Is to blossom in season to welcome Queen May;
We must welcome the birds, and the flowers, and
the bees,
And the butterflies gay, as they sport in the breeze;
All the robins and blue-birds their sweetest songs
sing,
When they see we have come to welcome the spring.

"Would they miss us, dear mate, if we should not
appear?
I am sure we should miss the sweet songs that we
hear;
All creatures are glad that the spring-time has come,
And birds that have wandered no longer will roam;
We bid them all welcome with smile and with nod,
And 'tis all we can do, trailing low on the sod!"

Oh, ye sweet, little Trailing Arbutus blooms, nay,
'Tis not all that ye do, dainty jewels of May,
For I know that your beauty and fragrance impart
The cheer and the gladness of spring to the heart;
And we anxiously watch thy soft blossoms to see,
And as ye hail the spring-time, so we welcome thee.

HANY.

COLOCASIA ESCULENTA.

Three years ago I bought a bulb of *Caladium*, *Colocasia esculenta*, which has increased to eight. Last summer, the largest one, three or three and a half inches in diameter, produced leaves measuring forty-six inches long and thirty-two inches wide. The bulb now measures four and one-half inches in diameter, or thirteen and one-half inches in circumference. It has two offshoots starting from the lower side of it. Can these be cut off without detriment, and will it increase the size of the bulb and consequently the leaves? I am anxious to grow as large a plant as possible. How large have they been known to grow in this country? I have thought of getting a whisky barrel and sawing it in two, sinking one-half and planting the bulb in it, so as to retain the moisture around the roots. Would it be of any benefit, or would the odor of the whisky be too stimulating? They have been grown in a half-shady situation; is that the best? I am troubled with weak eyes, and have to cut my reading matter down to the lowest possible limit, but I cannot get along without your very interesting MAGAZINE, as it increases my interest in plants and flowers, which I think are, as the saying is, "good for sore eyes."—J. E. C., *Brooklyn, N. Y.*

The offshoots can be cut away from the bulb without injury to it, and to its advantage for producing large leaves. The

largest leaf of this plant ever reported to us by any of our readers was raised in Baltimore, in 1878, and an account of it was given in the February number of 1879, page 43. This plant "produced over twenty leaves more than six feet in height, and the largest was fifty-two inches in length and thirty-nine inches in width." Using a barrel, as proposed, would be no advantage. No better course can be pursued than to dig a large and deep hole and fill it with the best of soil mixed with plenty of old, rich manure. Give the plant all the water it can use every day, and after it commences to grow freely it will take up a great quantity. It is not desirable to retain the water, as the barrel would do, and possibly cause the soil to become sour or sodden, but to let any surplus drain away; not even a "whisky barrel" will afford any better conditions for the roots. A half shady situation is not desirable; it is far better to expose the plant fully to the sun.

FIRS AND SPRUCES CROWDING.

Can you state whether it is possible to keep Firs and Spruces in shrub form without spoiling their shape, and how it should be done? We have so many, and they are very pretty when small, but would make the place too much of a forest if all were allowed to grow full size.—A. A. D.

Firs and Spruces cannot be kept small without annual pruning or shearing, and this practice always spoils their shape, making them look very stiff and artificial. Good taste condemns this course. The proper way to proceed in a case like that mentioned, is to remove enough of the trees to allow sufficient room for the further development of those that remain; and the number of these can be again reduced in the future, whenever necessary. One secret of keeping a piece of ground planted with ornamental trees in good condition is the ability to discern when it is necessary to remove superfluous specimens, and to decide promptly to do it. The beauty of a tree consists in its perfect development, and this cannot be accomplished when crowded by others.

BEGONIA—ROSE—PELARGONIUM.

Please tell me, through the *MAGAZINE*, how high the Tuberous Begonias usually grow? Mine, last year, were only five or six inches. When grown from the seed, will they bloom the second year? The bulbs I procured last year, half a dozen, all proved scarlet, but very handsome and were much admired.

I have sent for two Polyantha Roses for next winter's blooming; will you please give some instructions how to grow them successfully. There are probably other readers who will be glad to know.

What is the best treatment for Pelargoniums after blooming? Many persons keep the old plant indefinitely, thinking the blossoms finer than from new. I would be glad to know the experience of others.—*MRS. D. S. C., Barrington, R. I.*

The Tuberous Begonias are all low-growing plants, the tallest of them being only about a foot or fifteen inches high. By good management the seedlings can be brought into bloom the second year; but it oftener requires the second year to raise bulbs sufficiently strong for blooming the following summer.

The Roses can be potted when received in fibrous loam, enriched with old manure; during summer the pots can be plunged outside, and can remain until cool weather comes. The plants should then have a rest until the middle or last of November, when they should be repotted in fresh soil, and started to grow after cutting back well the new growth.

Supposing the last question refers to the annual flowering Pelargoniums that have been kept in pots, it may be said that about the first of September the new growth can be shortened in to about two inches on all the branches, and then the plant turned out of the pot, the ball of soil reduced in size without materially shortening the roots, and be repotted with an inch or so of fresh soil all around firmly pressed in about the ball; give water and start into new growth.

BLACK FLIES KILLING ASTERS.

Last year I had a handsome lot of Asters. Soon after they commenced blooming nicely they were covered with little black flies. I tried several things to kill them, but all had no effect on them, and they killed the Asters. Please let me know if there is anything that will kill the miserable things.—*J. W. D., Tipton, Iowa.*

The difficulty in this case is to apply a substance to destroy or drive off the insects that will not discolor the flowers. Probably some of them must be sacrificed with any remedy. We should try dusting the flowers with Hellebore, or applying it in water. We should try insect powder in the same way. A strong

tea made of Quassia bark, perhaps, would make the pasturage distasteful to the flies, or tobacco water might have a similar effect. We have had no experience with this fly. If any of our readers can offer a remedy for this case it is to be hoped that it will be made public in our pages.

NOTHING BUT LEAVES.

My Tulips, Gladioli, Iris, Hyacinths and Narcissus gave us much pleasure; but my Crown Imperial, Yucca filamentosa, Deutzia and Tree Pæony have yielded no bloom after waiting three years. The Crown Imperial grows up in spring and looks thrifty for a while, then the top all dies and we see no more of it until spring again. The other plants grow but do not bloom; what shall I do for them, or can I doctor them at all? These plants do not stand in water, but on flat ground.—*C. N. U., Blakesburg, Iowa.*

In this case no "doctoring" is required; the proper course to take is to wait and let nature do her perfect work. These plants are evidently set in a rich, or what is sometimes called a fat, soil. When their roots have partially exhausted it, and when, also, the stems and branches somewhat overbalance the root system, the reproductive organs will assert themselves, as will be evinced by no lack of bloom.

WAX PLANT.

I would like to know how to cultivate the *Hoya carnososa*. I have one which grew nicely, last summer, but not any last winter, nor yet this spring. The leaves are turning yellow and are shriveled on the under side. I am afraid it will die.—*G. F. F.*

Growth should not be expected from this plant in winter and early spring; that is its resting season, when it should have water sparingly, and be kept at about 60° to 65°. We fear it has been supplied with too much water the past winter, and that is the cause of the faded leaves. The best thing now to do is to turn the plant out of the pot, reduce the ball of soil to some extent without much disturbing the roots, and repot again, with good drainage. After this give water sparingly at first, but increasing it with the demands of the plant after growth commences.

PROPAGATING ARBOR VITÆ, &c.

Will you be so kind as to inform me how to propagate Arbor Vitæ, Spruce, and the like? If possible, I should like to try some this spring.—*REV. F. E. E.*

Most of the coniferous evergreens are most easily raised from seed; but the varieties of the Arbor Vitæ and the Juniper, and some other species are increased by

cuttings. These cuttings are taken late in the fall or at the commencement of winter, and placed in pans or boxes on the cutting bed with a slight bottom heat, and a low air temperature. They are a long time in forming roots, and are only ready for removal to the open ground by the last of spring.

FALL BLOOMING ROSES—YUCCA.

Four years ago I purchased a number of Hybrid Perpetual Roses, they are in a rich border and are pruned every spring, yet only three varieties bloom more than once in the season. These are *La France*, *Coquetté des Alps* and *Baronne de Maynard*. The delinquents are *Gen. Jacqueminot*, *Gen. Washington*, *Baronne Prévost*, *John Hopper*, *La Reine*, *Paul Neyron* and several others, all mentioned in the catalogues as free bloomers. After the spring flowering I cut them back and keep them well cultivated all summer, but I get no Roses. Can you advise me what to do? They make a strong growth, so it is not because they are starved that they fail to flower.

In the same border I have a large *Yucca* which was bought at the same time, but it has never bloomed yet. Would you advise me to move it this spring? Everything else does well in the border, but these things are a constant disappointment.

We have had the severest winter known for many years; but I have a very large bay window full of flourishing plants that are a source of great pleasure. I enjoy the *MAGAZINE* very much, and find it extremely useful as a source of information.—*MRS. W. R. H., Sigourney, Iowa.*

There is a great difference among the different varieties of Hybrid Perpetual Roses about blooming a second time, or in autumn. In this case the lack of bloom is not entirely due to the varieties, but is partially owing to the treatment of the plants. The varieties mentioned in the last list are not free bloomers in autumn, and yet, most of them will afford some bloom, if properly managed. After blooming in spring, the strong, new canes should not be cut back, but be allowed to remain and be bent down to, or toward, the ground, fastening them securely with pegs. In this position a great many shoots will start out, and these will show more or less bloom. In the following spring cut away as much of the previous year's growth as may be thought best. This is a matter of judgment founded on experience. Very strong growing kinds can be allowed more wood than the weaker ones; this difference should also be observed in summer, and whether to retain all the new shoots and bend them down, or only a part of them, or even with some plants only to shorten the shoots without laying them, must be decided by the vigor of the plants, and

each grower must observe the habits of his Rose plants and govern his treatment of them accordingly.

Do not move the *Yucca*; when the force of its growth is somewhat checked it will bloom annually.

GRAPES ROTTING—HIBISCUS.

Will you please tell me, through the *MAGAZINE*, what causes our Grapes to rot before they ripen? We have *Clinton*, *Concord*, *Norton* and *Catawba*, all in the same soil, and near together. The *Clinton* and *Catawba* never rot, while the *Concord* and *Norton* always do.

Also, please tell how to treat Chinese *Hibiscus*. The leaves have all fallen since the cold weather came, and now, while the shrub is green and plump, it shows no disposition to make new leaves. Shall I put it in the open ground when the warm days come, or repot in fresh earth.—*MRS. F. G. C., Guineys, Va.*

There is much obscurity yet in regard to the rotting of Grapes. Why some kinds should rot in certain localities while other varieties similarly situated should escape is not understood, and so far as knowing what varieties are suitable for a particular locality, there is no certainty; the only way of determining is to try. Usually, in those regions where most rot prevails, the *Concord* and the *Norton* are most exempt, while *Clinton* and *Catawba* are most liable to it. In this case it is reversed. There are two kinds of "rot" recognized, the "brown rot" and the "black rot;" the brown rot is preceded by mildew of the leaves, while black rot attacks the berries directly, without affecting the foliage. Both are fungus growths. The course to pursue in the present case is to discard those sorts that fail in this manner and plant more of *Concord* and *Catawba*. It will be safer for those that remain, if the place is cleared of the rotting varieties.

The *Hibiscus* has not had sufficient heat and perhaps too much water the past winter. It is better now to plant it out.

HIBISCUS—CALLA.

Can the Chinese *Hibiscus* be grown successfully as a house plant in a bay window facing the South?

I have a very thrifty growing *Calla* that has sent up three flower stalks, this winter, on two of which the buds did not open, although they seemed perfectly formed. What was the cause?—*MRS. J. D. O.*

The bay window is a suitable place for the Chinese *Hibiscus*, other conditions being suitable. A temperature of 60° to 70° in winter will suit it.

The *Calla* should have had a little more nourishment provided, by means of liquid manure once or twice a week.

LOSS OF LILIES.

A correspondent, a few months since, told the MAGAZINE readers of her unfortunate experience with some Lilies. I will add my testimony to the same effect. I planted two Lilies, last spring, *Tenuifolium* and *Longiflorum*, in a proper manner, on April 4th. I took particular pains in preparing the ground, and in having it well located and drained, because, two years before, my *Longiflorum* died in the ground, after blooming grandly for three years. Neither of these Lilies appeared above ground last summer, although four or five other Lilies in the same bed did well, and made fine displays. In the autumn, I examined the ground with a spade, but failed to find any trace of the decayed bulbs. If they had evaporated the ground could not have been left more innocent. With this experience, corroborated by that of another, will it be worth while to try again?—J. T. R., *Syracuse, N. Y.*

Try, try again, is the refrain of the old song, but whether there is truth in the poetry applicable to the present case, we cannot say. Perhaps the experience given on page 85, in our March number, may give some encouragement. But will not those of our readers who have had the above named varieties of Lilies several years in the same place let us hear from them about it, or, if others are losing the varieties mentioned, as the writer of the above has, will they not make it known until this subject is fully discussed.

BILBERGIA.

Will you please inform me how to treat *Bilbergia* after blooming? If the old branches are allowed to remain on the root after flowering, will they ever send up new shoots, or should they be cut away, in order to make room for new growth? We have a plant which has just finished flowering, and it seems a pity to waste our care, if the plant needs pruning to ensure a show of flowers next season.—A. B. S., *Canandaigua, N. Y.*

The suckers of the *Bilbergia* will root and progress more rapidly if left on the old plant until they are partly grown, when they can be taken off and potted in good turfy loam mixed with an equal quantity of sand, giving the pot good drainage. If the suckers are left on the old plant, which can be shifted into a pot of larger size, they will make flowering crowns for the next season.

HOLLOW CELERY.

I am troubled with my Celery stalks being hollow. I raise my plants and keep them in boxes until I put them in the trenches. Can you tell me any cause for this trouble?—L. A. M., *Medfield, Mass.*

The opinion prevails, with how much of truth we cannot say, that checking the growth of the plants, by any means, causes the stems to become hollow. As there is no need for an event of this kind,

and if nothing worse happens it makes a delay, good cultivators will so prepare the seed-bed, and care for their plants in the early stages that steady growth will be maintained. So, also, the ground, when the plants are finally set, must be mellow and rich, and the plants must not lack water during the growing season. The statement of our inquirer that the plants are raised in boxes and kept there until planted out, probably gives a key to the difficulty; it would be almost impossible to do so without seriously checking the plants. When the seedlings are two or three inches high they should be set in a well prepared bed, in cold-frame, or in some warm, rich and sheltered open border, where they will have a chance to grow freely until they are strong and stocky, ready for the trenches.

HELIOTROPE—HYACINTHS.

Will you give me some information in regard to *Heliotrope*? Mine will grow very thriftily for a short time, then the leaves begin to turn brown and die. Then, in a short time, the plant will look as fresh and pretty as can be, but never blooms. It has been doing just so all winter. I have it in rich soil and well drained. I hear the same complaint from some of my neighbors.

I have some *Hyacinth* bulbs which have bloomed. They are still in the pots and new bulbs seem to be forming. Now, what shall I do with them, and will the new bulbs bloom in pots for me next winter?

We hope gardeners that have had experience with *Heliotropes*, diseased as above described, will give some information about it. It is not a new or rare trouble, yet there is less known about the proper treatment of such plants than there should be.

The *Hyacinth* bulbs should be cared for in the pots until growth is finished, when, as the foliage begins to turn yellow, the water can be decreased until the bulbs are dried off. Then they can be set in the garden to remain. The young bulbs from this source will not be suitable for next winter's forcing. Strong bulbs are needed for forcing.

SQUASH BORER—STRAWBERRIES.

In the February number of your MAGAZINE one correspondent tells of using saltpetre successfully to prevent worms entering the vines of Squashes; will he please tell how it is applied?

Also, is there any Strawberry grown at the present time possessing the delicious flavor of the old Hovey's Seedling.—MRS. J. J. L., *St. Mary's, Ohio.*

In the communication referred to the writer states, "I used the saltpetre according to directions in the pages of the

last July number." The directions there are as follows: "Dissolve saltpetre in water, an ounce of saltpetre to a gallon of water. Pour this freely on the young plants as soon as they come out of the ground, till the earth is thoroughly wet. In four or five days repeat this operation. At the same distance of time repeat this again. Probably about three times will be enough."

Perhaps Triomphe de Gand, Charles Downing, or Longfellow may be satisfactory varieties of Strawberries for quality.

AMARYLLIS NOT BLOOMING.

I have quite a number of Amaryllis bulbs which have not bloomed, February 19th, or even seemed to grow this winter. I repotted them late in the fall; was that a mistake, or am I looking too early for flowers? Should the plants be kept in a warm room, or one of an average temperature of 50°? I do not know what species of Amaryllis mine are; some have round bulbs and some are rather long.—E. E. S., Lancaster, Pa.

Amaryllis do not need to be repotted often; it is a check to them, and they start slowly after it. The bulbs in their resting, or dry, state require considerable heat, 60° to 65° is not too much, but this temperature can be reduced when water is given and growth desired, and gradually increased a little afterwards. The middle of February would have been early enough to commence watering with the bulbs inquired about. The Amaryllis, like the Tuberose, can best be kept dry and warm while resting.

TO DESTROY ANTS.

I would like to know what will destroy small red ants in the garden. They have destroyed my Onions for the last two years, eating the roots off when small.—E. E. M., Hemmingford, Ont.

Trap the ants. Place meat, bones, or pieces of sponge with sugar in them in the way of the ants, and occasionally pick them up and drop them into hot water. Another way is to sink some vials of sweet oil nearly to the mouth in the soil. The ants are attracted to the oil, but it kills them.

VARIOUS INQUIRIES.

How to treat Geraniums so that they will bloom in winter, is inquired about by Mrs. E. C. L. This subject was very fully considered in our last volume, by several correspondents. The general conclusion was that plants about a year old, or older, were much better for the purpose than young plants started in au-

turn. If you have such plants in pots plunge them in the open border in their pots for the summer, and keep all buds removed from them. About the first of September take them up, repot in good soil, and pinch in the ends of the shoots, and take them inside. If plants have to be procured, get thrifty young plants, this spring, and treat them in the same way.

L. A. G., Tippecanoe County, Indiana, inquires how to cultivate the Dwarf Pomegranate. At the North this plant is raised in pots or tubs, and plunged out in the border during summer, and taken up at the approach of cold weather and placed in the greenhouse or in a cellar for the winter. A light, rich soil is suitable for it, and in spring, before plunging, remove the plant from its pot, and reduce the ball and give fresh soil, attending at the same time to the drainage.

T. M. H., Edgerton, Ohio, inquires how to propagate the Passion Vine. It is increased by seeds, cuttings and layers; hybrid varieties by the last two methods. Where one only wants to raise an extra plant or two, a branch can be layered into a pot, and thus rooted with little trouble.

H. M. asks how to care for Rivina humilis. There is no difficulty in raising this plant. Pot it in a light soil, give it water as needed, and keep it in the window or the greenhouse.

J. D., Alexander, Illinois, asks for instructions from any of our readers having experience in regard to Mandevillea suaveolens. Will some one please reply?

PARSLEY.

If only a few plants are required, or should frames not be available, a pinch of seed might be sown in a box, or even a pan, filled with good light soil, and a very little warmth will bring on the plants much in advance of those raised in the open ground. To some this may appear to be needless trouble, but those who, like myself, have been more than once much bothered because Parsley was scarce, do not care how much trouble is taken so long as we get a good supply. Besides, I am under the impression that we obtain much finer plants since we have adopted the plan of transplanting.—W. J. M., in *The Garden*.

COBŒA SEED.

These thin, flat seeds are apt to decay if placed in the soil to germinate; the following plan I have followed with perfect success: In April, take a strip of flannel three inches wide, fold it fan-shape and place it edgewise in a coffee cup; drop a Cobœa seed between each fold of the flannel, set the cup in a warm place and keep the flannel damp; in a few days some of the seeds will show a white spot, and these can then be removed into small pots filled with mellow soil. Put the seed edgewise in the earth, pressing the soil a little closely about the seed where the white spot shows; this, the radicle, will soon push down into the earth, leaving the soil loose over the top of the seed, from which the cotyledons or seed leaves will soon start. Now, either to keep the seeds too wet or too dry is equally disastrous. A good way is to insert the small pots into a tin basin of soil, and cover the whole with a piece of damp flannel and keep warm. After the seed leaves start keep the plants in a sunny window until danger of frost is over, then plant them in a southern exposure in a bed made deep and rich with sheep manure, or some old well rotted manure, and perhaps you will feel for the first time you are made acquainted with the possibilities of this lovely vine. I have had one plant cover a wall ten feet square and loaded with its purple bells. Keep one of your seedlings in a pot for winter, enlarging the pot from time to time; it is a very satisfactory vine for the house.—A. P. H., *Watervliet, Mich.*

NOTES FROM BOSTON.

The horticultural show in Boston, this week, was fair, Orchids and spring bulbs being the features, but nothing like last year's revel of Roses and Orchids together. President F. B. HAYES is greatly missed. Few Roses were shown, but those fine florist's flowers, Paul Neron, grown to the size and color of Pæonies, and none the better for it. The new black Rose, Col. Fred. Breton, is the deepest hued Rose yet produced, a fragrant midnight, and very fine in shape. Souvenir de Reine is another very fine new, dark Rose. Pauline La Bonte is finer in every way than Catharine Mermet, vases of the two being close together. These are from Capt. MOORE'S

Rose houses, at Concord. I'm not prejudiced for Boston, in general, but New York Roses don't compare with those the growers here send out. The Climbing Captain Christy keeps up the prestige of the late President HAYES' green-houses, and is lovely white deepening to deep rose center. First prize went to JACKSON DAWSON, of the Bussey Institute, for Hybrid Perpetual Rose, Abel Carrière. The White Baronness out does Mabel Morrison in elegance, if there is choice in perfection. Not a Sunset Rose was in the hall; Boston don't take to it.

I notice, a contemporary says, large bouquets are worn on lapels, twelve sprays Lily of the Valley, for instance. I don't know where it gets its fashions, for the best authority, *The London Queen*, says distinctly, the huge corsage clusters are going out, and a single spray of Lily of the Valley with Violets, or a white Narcissus, is worn. White Tulips in bud, with their sheath leaf, are worn as dress flowers in London, and, let me add, appear in Boston streets. When a horticultural journal goes into fashions it wants correct ones.

The windows are glazed with frost, and we shall not make garden, in this latitude before Decoration Day. The ground hog saw his shadow this year Candlemas Day, and I think he knows as much of the weather as any of us.—S. D. POWER.

HYACINTHS NOT RESET.

I have not yet had the experience of Hyacinths rapidly deteriorating, in fact, a mass of flowers on a row of Hyacinths, last spring, and never reset but once, planted nine years ago, was conclusive proof that they may be grown for years. The individual flower stalks were not so large and full as the fresh bulbs planted the season before, but that, in some measure, was due to their crowded condition, some bunches having five flower stalks. The new imported bulbs, as I understand it, have not been allowed to bloom until placed in market, but have stored up vitality for the forcing process, for which they are universally grown. Therefore it is not strange if the second years' blooms are not quite so large and full as the first. Were the buds pinched the next year, I have no doubt they would become so strengthened as to again do as well as in the beginning, but as they

are such lovely early flowers, and make up in number of flower stalks what they lack in individual compactness, we prefer to omit the pinching, and for large specimen trusses of bloom add a few new bulbs every few years.—MRS. S. C. H., *Brookville, Ind.*

A FEATURE OF PARK GARDENING.

Among the pleasing features connected with the park gardening, at Chicago, and worthy of extensive imitation among gardeners, is the liberal use of Pansies, Daisies, Lobelias, and other pretty but modest flowers, too often banished from the lawn and consigned to the back garden on account of remaining in perfection only in the early and cooler portion of the summer. In the finest carpet beds these plants find a place, and when their blooming season is over, in July and August, they are carefully removed and their places filled with *Alternantheras* and other plants adapted to the purpose, of which a large stock is kept in reserve. Thus the planting continues throughout the summer, and a single bed is made to assume several different aspects in the course of a season. We cannot complain much of sameness with *Crocus*, *Tulips* and *Hyacinths* for early flowers, followed by *Pansies*, *Daisies*, &c., and later by pleasing combinations of brilliant foliage.—LEVANT COLE.

DEATH OF ORCHARD TREES.

A correspondent of the *Farmers' Review* offers some facts as evidence that many trees in western orchards are killed by a sudden visitation of severe cold after the early hot sun of March has started the sap in the tops when the soil about the roots is not frozen. Early heavy snows, falling or drifting in such a manner as to prevent the ground from freezing, produce the conditions which make the trees liable to injury in the manner stated. If the ground is frozen before being covered with snow no injury will follow. Sometimes the ground of the highest portions of an orchard is bare while the lower ground is drifted more or less deeply. The remedy is to remove the snow that falls or drifts on orchard grounds before the ground freezes, keeping the surface bare until the soil is well frozen, after which the snow will do no harm. Snowfalls before the ground

freezes are of rare occurrence, according to this writer, once in "a decade, or a score of years;" but at these times the mischief occurs, if we accept the indications of the facts he presents. It is well to observe them.

WORMS IN DAHLIA STEMS.

In the August number of your excellent MAGAZINE for 1884, I perceive a communication from S. A. B., of Iowa, inquiring about the small worms that were destroying his Dahlias. I found several of mine were effected by the same sort of worm, which killed and injured several of them. I carefully searched for the holes in the stem, and with a sharp penknife I made a slit upwards from the hole in the stem up to the part where the first appearance of wilting commenced, and by carefully guiding the knife so as not to cut the sapvessels, and gently opening the slit sufficiently wide as I cut upwards, I never failed to catch the worm and to pick him out. The worms varied from an eighth to half an inch in length. I cut no deeper than the center of the stem, and the plant never appeared to be in any way the worse for it, but bloomed freely.—J. A. D.

DAHLIAS.

Late last season, and in a very busy time, came a long distance, by express, a dozen fine Dahlia roots. They were a doubtful lot, and to make short work of them I took a spade, went into the garden and dug up a large circular bed, perhaps four feet in diameter; a peck of hen manure was dug into the bed, and the surface was left cupping to hold water. Then I drove down six stakes at equal distances, and to each stake planted two Dahlia roots. They soon sprouted, and when tall enough were tied to the stakes. They received weekly a pail or two of washing suds poured into the pit in the center, and I never had Dahlias grow and bloom so well with so little trouble, and concluded to try this easy labor-saving way another year. Green worms troubled the plants for about a week, but were hand picked every morning; they were so large they would do much damage to foliage and buds in one night, and so they had to be carefully looked for.—A. P. H., *Waterliet, Berrien Co., Michigan.*

KEROSENE TO DESTROY INSECTS.

The warm weather will bring us the pestiferous insects as surely as it gives us foliage, flowers and fruit, and as one of the best destructives of many kinds is kerosene in emulsion, it is well to repeat what in substance has at different times appeared in our pages, and to state more in regard to it. One mixture is as follows: Boil a quart of soft soap with two gallons of sour milk, and when cool add one gallon of kerosene; the whole is then churned for half an hour or more until well mixed. When used dilute with twenty times its bulk of water. Professor TRELEASE, of the Wisconsin Experiment Station, says: "As the result of numerous experiments, I would recommend an emulsion consisting of refined kerosene two parts; fresh, or preferably sour, cow's milk one part." The oil and milk are churned together from fifteen to forty-five minutes, varying with the temperature. The churning requires to be more violent than can be effected with an ordinary butter churn, and the aquapult force pump is recommended for the purpose. "The pump should be inserted in a pail or tub containing the liquids, which are then forced into union by continuous pumping back into the same receptacles through the flexible hose and spray nozzle." When this process is carried far enough "the liquid finally curdles, and suddenly thickens, to form a white and glistening butter, perfectly homogeneous in texture, and stable." This butter should be put up so as not to be exposed to the air, and can be used as needed by diluting it with water, two gallons to a pint of the butter.

EXPERIENCE WITH CACTUS.

In the January number, some one writes of having had a Cactus seven years, and it has not bloomed; but mention was not made what kind it was, and as I have a *Cereus triangularis*, and have experimented some with it to find out if it will bloom with less than a three years' care, and would like to have others enjoy the benefit for themselves, I will tell what I have observed.

I always select a slip from the top, or from branches that are vigorous and look most likely to bloom soonest on the parent plant. I took a slip, consisting of three leaves, each leaf about four inches

in length, from the top of my Cactus plant of three and a half feet tall, in March, 1884, and in July I had two magnificent blossoms, measuring six inches across and the same in length, including the stem. I potted it in sand and common garden earth, with a slight mixture of cow manure. This kind has the rich, scarlet blossoms that attracts attention everywhere seen. After blooming, I set it out in the garden bed, letting it remain in the pot, and gave it plenty of showering with other plants, and in August it had three branches start out from near the ground, which made rapid growth; and when the cool nights came I removed it to the house and let it dry off for three months, then commenced to water with soot water, and now, March 17th, it is budded again.

I have another branch that was accidentally broken off from the old plant in January, 1885, which I placed in earth, which within a week has put out a bud, and I am inclined to think that it does not require much root for Cactus to bloom. Perhaps I do not have as many blossoms at one time as many people do, but I never saw any more perfect, and I think soot one of the very best fertilizers for them, giving a very rich coloring. I have never had more than fifteen blossoms at a time.

I have one of the flat-leaved Cactus that bears a rich pink blossom, with which I am experimenting with a sandy soil and soot. If I am successful, I may write again. I would like to hear from others who keep this kind of plants. D. S. T., *Brockton, Mass.*

TRANSPLANTING.

This is the season throughout the North for transplanting all fruit-bearing plants and trees, hardy herbaceous plants, ornamental trees and shrubs and hardy climbing vines. Trees will be received from nurseries, often hundreds of miles distant. In receiving such trees and plants the purchaser should notice particularly two points: First, that the plants have good roots that have not been unnecessarily shortened or reduced in removal; and secondly, that the roots have not been dried, or injured by frost. This can be determined by cutting off some of the ends of the roots, if the bark on them when cut into appears white and

fresh and separates easily from the wood, they are sound and can be trusted.

As the season is a late one and the warm weather may come rapidly, it is quite probable that many trees will be delivered to purchasers after vegetation in many parts has started, and some may think it to be too late for setting them. They may be assured there is no danger, if the trees themselves are sound and lively. It is best to shorten in the heads of all fruit and ornamental trees, except evergreens, before planting; remove also, any broken or bruised parts of roots. Plant in ground that has been well prepared, and have the holes large enough to take the roots without crowding, and some space to spare. When filling in the soil work it carefully in with the hand under the stem of the tree, so that there shall be no hollow place underneath when finished; tread in the soil over the roots, making it firm, and it will not dry out. Evergreens can be mulched to advantage the first season.

THE SPRING WEATHER.

Vegetation has been very late in starting throughout the whole north and northwestern country. The work of the season has to be performed in a very short time. Those who made all possible preparation in the fall will feel the benefit of it now. Gardening of all kinds is late, and early crops will be specially valuable. Much damage was done last winter by the cold to different kinds of fruits. In nearly all Peach sections the buds have suffered severely, but few escaping death. Raspberries and Blackberries were

greatly injured, and many vineyards in the West have been badly frozen. Altogether, the outlook for the fruit grower the present season is not very cheering. The prospect of an Apple crop cannot now be determined. Strawberries not mulched, or insufficiently mulched, have, in many localities, been badly damaged by freezing and thawing during the early spring, and a full crop cannot be expected, however good the weather may be in the future. The general conditions of the weather are like those of last year; and then, on the 29th of May we were visited by the frost that cut off much of the Strawberry crop in many sections. We may again be visited in this manner, or we may escape. The plantations on elevated lands are most secure. The changes in temperature are frequent, and great, and rapid. The gardener and the fruit grower have need to be wide awake and industrious—"instant in season and out of season."

A NEW WAY WITH LIMA BEANS.

The latest improvement in raising Lima Beans is to use brush about eight feet high, stuck like pea-brush, instead of poles, as commonly practised. Plant in hills about three feet apart in the direction of the rows, two or three plants to the hill, and the rows six or eight feet from each other. Cut off the tops of the plants when they get above the brush, and stop all the side shoots when they are two feet long. The vines are much better exposed to the sun and air in this manner, and far larger crops are said to be matured than by poling.



OYSTERING IN LINHAVEN BAY.

OUR YOUNG PEOPLE.

AMONG THE PINES.

IV.

When a crew of men goes into the woods early in the season, there will be a time before the coming of snow when nothing can be done about getting the logs to the river. While waiting for the snow trees are cut down, sawed into logs

quite a number of logs. As soon as sleighing, or "skidding," comes, these logs are loaded from the skid-ways, and hauling begins at once. There is no time wasted in the pineries. Every hour is made to count. It occasionally happens that snow does not come until quite late. If the weather is cold, sledging is made by drawing water in a large tank from the river, and sprinkling the track. This freezes, and a thin coating of ice covers the road; another sprinkling thickens this coat, and in a day or two they are able to draw great loads over it. In many sections tram-roads have been constructed by laying wooden rails on which iron trucks, which take the place of sleds, are used. In this way logging can be carried on all summer.

A great share of the men employed in the lumber woods are from the cities and towns located on the rivers down which the logs come in spring. These men obtain good wages, and they make work in the pinery their dependence. Frequently men go into the woods in October, and remain there until the camp breaks up in March or April. Six or seven months of steady work brings them quite a pocketful of money. Many of



and "skidded." Skid-ways are made by laying small logs close together. On these the Pine logs are rolled as fast as cut, to prevent their being imbedded in and covered up by the snow, which will come some time in December. These skid-ways are made large enough to hold

these men "drive river," and "driving" lasts all summer on long streams. The logs are not often rafted out of the booms before August or September. From the time rafting is over until the season for next year's operations begin is the professional pinery-boy's resting-

spell. This is usually spent in the towns down the river, and often he uses up all he has earned by many months of hard labor before it comes time to go into the woods again.

"When the logs come down," the river towns reap a golden harvest, then they are lively places. But with all their faults and failings you will find more free-hearted, warm-hearted men among the pinery and rivery boys than in any other class of laborers I have ever met. They are "generous to a fault." Too generous for their own good, in the majority of cases. Many are the practical jokes they play on the greenhorn from the city, who visits them in camp and on the river. A favorite one is to send him to some part of the camp with the request that a "cross-haul" shall be sent up at once. He takes it for granted that a "cross-haul" is something used in lumbering,

and does his errand soberly, only to find himself unmercifully laughed at. Then he discovers that a "cross-haul" is an imaginary thing kept for the benefit of such ignoramuses as himself, and, if sensible, he "acknowledges the corn," and laughs with the boys over the joke at his expense.

The boys generally wear trowsers and "wam'us," the pinery name for a jacket, or overshirt, of thick, stout mackinaw, of blue, gray or red. A crew of men clad in these colors presents a very picturesque appearance grouped among the evergreens. "Boot-packs," of light colored leather, are more generally worn in the woods than any other kind of foot-covering. They are large and loose, and two or more pairs of socks can be worn with them. They are more comfortable than boots for use in the deep snow.—EBEN E. REXFORD.

STELLA RAY'S JOURNAL.

April 1. Before mamma's revelation of Mehitabel having saved my life, I had resolved that her ug—that her name should not appear again on these pages. But now I feel as though she, herself, were hung like a millstone about my neck, to be carried around the rest of my life. Of course, I ought to do a great deal for her, in every way, as long as she lives, and I can't do anything. I don't see what she bothered herself about me for, any way! But then, if that dose had proved fatal, mamma would have been self-accusing and wretched the rest of her days; and so, I suppose, it's all right. I am well paid, however, for not having had more perfect faith and trust in the wisdom of her judgment, for otherwise she would not have felt driven to reveal what is now a burden to me to know. Yes, a burden; despite our minister's reprimand for allowing *pride* to make us shrink from proffered favors, except in the sense of obligations which must be cancelled, whether convenient or not. I don't mind being under obligations to those whom I love; but I couldn't *love* her if my life were the forfeit.

Referring to my calendar, I find the quotations for this month too lovely to let pass by with the passing month.

"Oh, to be in England now that April's there,
And whoever wakes in England sees, some morning,
unaware,

That the lowest boughs and the brushwood sheaf
Round the Elm-tree bole are in tiny leaf,
While the chaffinch sings on the orchard bough
In England—now!"

2. Sometime ago I wrote to Will for a "cabinet" photograph of himself. So, yesterday, when our mail was brought in a package was handed me, the form and size of which led me to cry out, "O, here's Will's picture!" and all gathered around to see his splendid face, while I tore off an astonishing number of wrappings, and found at last between two pieces of pasteboard the April page of a last year's patent medicine almanac. We looked at each other in blank disappointment a moment, and then mamma exclaimed, "*The naughty boy!*" Harvey kicked up his heels and laughed; Effie went off and pouted for half an hour, and papa exclaimed:

"And so you are April-fooled," and I—well, I shall remember this, young man.

4. The weather to-day is delicious, but there is little hope of its continuance. Last month, as a whole, proved a great trial. Thermometer often below zero. On two or three nights, when the sky was clear and stars shining, papa saw flashes of electricity spread in all directions over the sky. On one of those same nights some friends in Northern Ohio reported having seen the same in a clear sky. What next?

6. Yesterday was Easter Sunday. Our church was draped with evergreens and brightened with a few flowers. Papa has tried to work a reform in the matter of extravagant floral decorations. The artificial Ivies, Ground-pines, etc., are to be discarded hereafter. We are not to mock the Deity by decorating a building consecrated to Him with feeble imitations of His own handiwork. I am glad to have such absurdities made clear to me while young, for a safe-guard in other directions in after life.

8. I do wish I could think of something really useful to do for Mehitable without having her here in the house. Any way, her mother can't spare her.

13. Every time I look up from my writing, I see that solemn motto at the top of my calendar, "*The development of a soul; little else is worth study.*" So now I've turned its face to the wall, and have drawn my Rosemary closer to me. This precious plant has been a great comfort.

15. After a flurry of snow another delightfully balmy day. If I were a winter-bound plant I should sprout at once.

20. I think that Harvey and Effie are really learning quite a good deal. They know the forms, and can classify most of the different varieties of leaves. With my prompting of the subject, papa frequently questions them, and seems much pleased with the result.

Now, if his hip were only well, and grandpa were not having so many strange sick spells, and if I did not know of Mehitable's officiousness in my early behalf, I think I could be quite happy.

24. So many things I'd like to say to my journal; do not know which to record and which to omit. But there is so much feeling in the country regarding the illness of a man who is the nation's acknowledged and beloved hero that I must make a note of it. The refusal to allow the use of a secret remedy in his case and the comments excited thereby has aroused papa to warm expression on the subject. He says that "all knowledge pertaining to human life and health should be as free as the air we breathe. No premium should be placed upon that. The honor entailed and the everlasting gratitude of humanity are sufficient reward, if reward be desired." What impressed me most forcibly was his reference to the fact that "contributors to

other sciences feel fully compensated if, after years spent in research, their discoveries be deemed worthy of recognition as valuable additions to scientific knowledge. Then why should medical science, involving human life, ever be the exception!"

I am glad to record these ideas of papa's, so that I may not forget them. For surely a great deal of money is thrown away on secret remedies, which are often frauds.

26. A woman, who would like to pass for a lady, was waiting here, to-day, for "the doctor" to come in, and while talking volubly boasted of having crossed the ocean five times. Mamma seemed surprised, and inquired if she were of English birth; she glibly answered, "No, indeed; I am very proud to claim this as my native land." When she was gone, mamma commented severely upon the reckless habit of talking regardless of the exact truth. I wondered at her strong language, until she inquired if it had not occurred to me that a native of this country who had crossed the ocean five times would be left on the other side. It seemed so absurd, that when I recalled the complaisance with which she had made that statement, my laughter just came of itself. But I shall never think of her hereafter except as a sort of monstrosity.

27. Everything that ought to be green and growing in the early spring is now up and battling bravely with the chilly nights and cold rains and the parting flings of the long, bitter winter, interspersed now and then with a day of ravishing loveliness and promise.

28. I forgot to note that our last Saturday's Medley Club listened to the reading of "Evangeline," which poem, by the way, Auntie Starr used to have me read aloud until I had mastered the measure and accent so as to read every line smoothly. Then two or three of us, with pencils in hand, thought to prove whether there really "are more than one hundred and fifty allusions to plants." By calling trees "plants," and counting the repetitions of many names, there certainly are. I counted also the single references to different animals, birds and insects, and found that thirty-eight are named. So much for Longfellow's draughts on nature for this one poem.

29. Mary Roland's only brother, Cyrus, not yet sixteen, has got himself and family into trouble by having formed bad associations. Last evening, Sambo rushed in, exclaiming:

"Doctah Ray, me an' another fellah has jes' toted that thah Roland boy home, moah dead 'an alive, with 'is head swingin' limp like it was tied on with a rag. I 'spect we'd bettah go ovah an' see if we can't bring 'm aroun'. He's got moah on boa'd than he can carry."

"Sambo," said papa, sternly, "were you told to send me over there?" In confusion, he answered, "Yes, sah; of cou'se, they wouldn't have no doctah but you, sah."

"Then why did you not say so at first? You talk too much. Now, mind! you have to stop it." Then off papa hurried, only two doors distant.

It seems he found Emma weeping bitterly, but Mrs. Roland was very quiet, though pallid, she merely said, "Doctor, when reaction comes on, after this stupor, the boy is to be kept sick, you understand—too sick to be up, until he shall have become convinced that this sort of indiscretion does not agree with him—that it 'doesn't pay,' to use his own parlance. You get my meaning? He is not to recover from this 'attack' all at once. Meantime I will give him my very best attention."

Papa says she is a woman of wonderful nerve and firmness, that what he would not have dared propose, she, herself, suggested.

31. I have commenced knitting a shoulder shawl for the preserver of my life.

NEST BUILDING.

With the warm, sunny days of spring, have returned the gay little feathered travelers who have passed the season of cold and frost in warm southern climates. They, with their bird friends who were sturdy enough to bear the winter in these northern latitudes, are now busy building their curious, and in many instances, beautiful little summer homes.

The Robin, with the help of his mate, builds his nest in the forked branches of an Apple tree, and the beautiful Oriole makes her home after a different fashion, for she swings it upon a branch, and instead of having an entrance from above or beneath, it is at the side. Then there are the Wrens, pretty little brown creatures, who give pleasure to many with their sweet, clear song. Their nest is large for the size of the bird, and they use for it moss and twigs, lining it with feathers. It is covered with a roof, or dome to protect it from the elements; they usually select some secluded place where they may feel safe from harm, and often build it beneath a shelving bank, where it will be protected from rain, or against the side of a tree, where they will so cover it with moss or lichens that it seems truly a part of the tree.

The Sand Martin, or Sand Swallows, too, are curious little builders, for they, with their bills, excavate a curved or circuitous gallery in some sand bank. This gallery will sometimes be from two to

five feet long, and at its extremity slightly raised, the bird places some soft substance for the purpose of a nest.

Another species of Swallows builds nests in unused chimneys a short distance from the top. They make this little home of clay or mud, which they form into tiny balls, and ingeniously fasten them together with straw and other material mingled through them. The nests are cup-shaped and open at the top. As the birds fly in and out of the chimney, to and from the nest, they make such a curious whirring sound that it is sometimes almost like thunder.

The Tailor-birds are natives of the East Indies and Indian Archipelago, and make their nests by sewing together two of the leaves upon the extremity of a branch or twig. With their sharp beaks they pierce holes through the leaves, using vegetable fibers for the thread with which to lace them, as one would a shoe. They then line this bag or pouch with soft cottony substances which they know where to find among plants and shrubs.

The Weaver-birds, also, build singular nests. They are natives of Asia, Africa and Australia. The different species construct homes which best suit their tastes. The Social or Republican Weaver-birds of South Africa, make an umbrella-shaped roof or canopy, and seven or eight hundred nests are arranged under it in honey-comb fashion, with en-



trances from beneath. An Acacia is one of the favored places selected as a support for this roof, which is to cover so many homes. This part of the work is done by the whole community of birds who expect to live beneath it. Each separate home, however, is built by the pair of birds that expect to occupy it.

Another species of the Weaver-bird places the nest on the extremity of a branch over-hanging the water, and often will, year after year, build nest beneath nest, until there will be a succession of three, four or five hanging together.

Many other little creatures besides birds are also nest builders, for a fish, called the Stickleback, skillfully constructs a home in the way of a nest; and there are Squirrels, Spiders and Mice, even the well known little Mouse, which is often so tormenting in one's home.

Nothing pleases these mischievous creatures more than to get into a drawer where papers have been placed for safe keeping; but havoc is soon made if the small Mouse makes his way into that drawer, for with his sharp teeth he will chip the paper into the finest particles, gathering them into a light and soft heap, and it is no wonder that he delights in such a soft, warm place for his home.

The Harvest Mouse, which is a tiny creature, makes its nest among the Wheat and Grass. It strips or shreds the grass with its teeth, and then weaves it into the softest, daintiest ball, with an opening which closes as soon as the Mouse has either entered or made its exit, and this entrance it is almost impossible to find, except by the ingenious little worker who made the nest.—M. E. WHITTEMORE.

THE CODLIN MOTH ESSAYS.

The Prize Essays presented this month relate to a subject with which great pecuniary interests are connected. The damage done in this country every year by the codlin moth amounts in the aggregate to an immense sum, and if anything in these essays will arrest the attention of orchardists, and cause them to put in practice some of the approved measures to destroy this insect pest, some good will be attained. There is no doubt that the concerted action of Apple raisers for the destruction of these moths would reduce them to an inconsiderable number.

One of the accepted essays gives the details of several plans that have proved more or less successful in the destruction of the moths, and under the different circumstances and conditions that this insect is to be met opportunities are presented for the employment of all the various modes of attack that are known. The writer of this paper has omitted any mention of the use of arsenic in any form; it is reasonable to suppose that this omission is purposely made, thus signifying disapproval of it. Some parties are now very persistently advocating the spraying of the orchards with water containing arsenic, Paris green or London purple, when the fruit is about the size of marbles, or soon after the falling of the blossoms, renewing the application when necessary after heavy rains. There is no question that this operation is productive of good results, in fact, it is abundantly proved; but, on the other hand, serious accidents have attended the agricultural use of these poisons, and it is desirable to do without them, if possible.

That this course is possible and yet be able to destroy the moth as effectually is apparent, if we may accept the statements of the other essayist, as published. Most of us are aware that sweetened water has been tried for trapping the codlin moth, and renounced as useless; but these trials have always been made by hanging out bottles or vials of some sweet liquid. The features by which the plan offered by the essayist differs from others where sweetened water has been used are these: first, the liquid is placed in a vessel with a large open surface, so that ready access is offered to the insects; secondly, the attractions of the bait are enhanced by the addition

of vinegar, which gives it the Apple smell that proves especially alluring to the moth. As some corroboration of the value of this method, we refer to the experiment of JOHN MCINTYRE, an account of which was published in the *Canadian Horticulturist* of May, of last year. In this experiment the trap was whey placed in large open dishes. The discovery of trapping the codlin and other moths in this way was accidental, but was afterwards verified by experiment. Without noticing this experiment at greater length, we give the words of Mr. McI. in conclusion. He says: "I have set the whey trap ever since, and have never seen a worm in an Apple. Set your trap in the orchard about two feet or so high. The odor of the whey must be seen to, and the trap or dish filled to within two inches of the brim." It should be noticed that the two points made prominent in Mr. RUNDEL'S method are the very ones that Mr. McI. here calls attention to—*vessels of easy access*, and a *liquid of an attractive odor*. This method of trapping insects is so easily put into practice that we hope to hear of its very general trial the present month, and it is quite proper that the ladies and children should take the lead in carrying it out, in which event we have no doubt it will be well done.

POMOLOGICAL SOCIETY.

As the guests of the Michigan Horticultural Society, the American Pomological Society will hold its next meeting at Grand Rapids, Michigan, commencing Wednesday, September 9th, 1885, and continuing three days. All Horticultural, Pomological, Agricultural and kindred associations are urged to send delegates to this meeting, and a general invitation is extended to all persons interested in the cultivation of fruits to be present and take seats in the convention. The society encourages an exhibition of choice fruits, especially new varieties, and exhibitors should not fail to give notice as far as possible, at an early date, what room will be needed for their fruits. Packages of fruit should be addressed to CHAS. W. GARFIELD, Grand Rapids, Mich., for the American Pomological Society.